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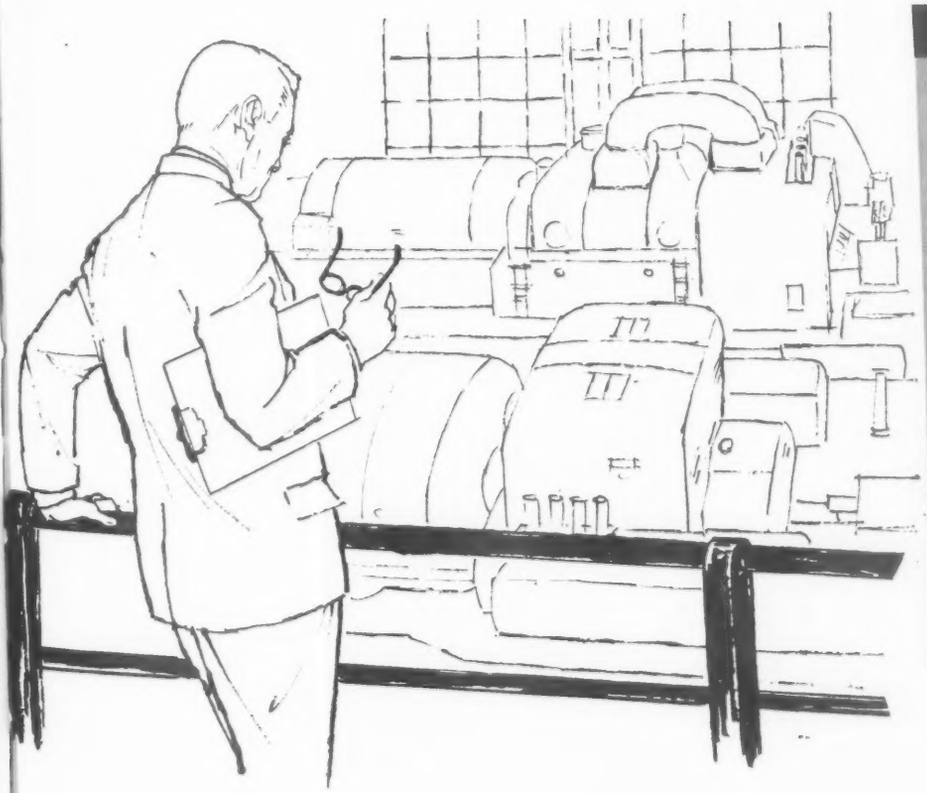

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A M

EDITORIAL

NEW LOOK

The coming election brings with it a new look in political choices. With Senator Kennedy and Vice-President Nixon as the presidential candidates, we are sure to have a new and youthful look on the National scene, whoever is elected.

With new staff and officers in S.A.M. we hope to create something of our own new look via the format of *Advanced Management*. While our policy is not change for change sake, we do want to be responsive to the interests and needs of the readers. A publication that fails to stimulate interest as well as meet the readers' needs is a static medium.

Advanced Management, as the voice of scientific management in America, should be a dynamic force in this field. Its contents should be forward looking, imaginative and creative. It should not allow its columns to be used for rehashed, sterile material once employed elsewhere and with limited appeal. A dynamic publication for a dynamic organization geared to the accelerated events of a vital social order must be in the vanguard of ideas, not trailing behind.

An *Advanced Management* publication must, if its name is to be a legitimate indicator of its purpose, present advanced and scientific ideas for management. There has been an increasing quality of professional treatment emerging in the magazine. This has been due to the general guidance of our unusually high placed advisory board, the more critical individual selection of material by Dr. Flynn and the technical improvement effected by the publications manager, Frank McNeirney.

Vince Flynn has gone on to other opportunities and indeed we wish him well in his efforts. We are pleased to announce that the Advisory Board will, in addition to continuing policy guidance, have expanded responsibility in the selection of awards for outstanding contributions to the publication. Marion Cusick continues as Circulation Manager and Pat Reddington as Business Manager. In addition, the publication will have the guidance and managing editorship of Henry Singer of Remington Rand who has had wide experience as a professional editor as well as a management specialist. We will also enjoy the professional guidance of an Editorial Board made up of editors of leading business publications. As Editor-in-Chief, it will be my function to integrate the policies of guidance into a working publication. You can help greatly in this task by completing the questionnaire on the reverse side of this page and returning it to us. With this team, with this support and most important of all, with the criticism and contributions of you, the readers, we believe that *Advanced Management* may indeed fulfill the destiny for which it has so ambitiously been named.

Walter Mitchell, Jr.
Editor-in-Chief

HELP WANTED!!

Advanced Management seeks top flight creative, aggressive management people to help in expanding and improving leading scientific management publication. Please send in your response as soon as possible.

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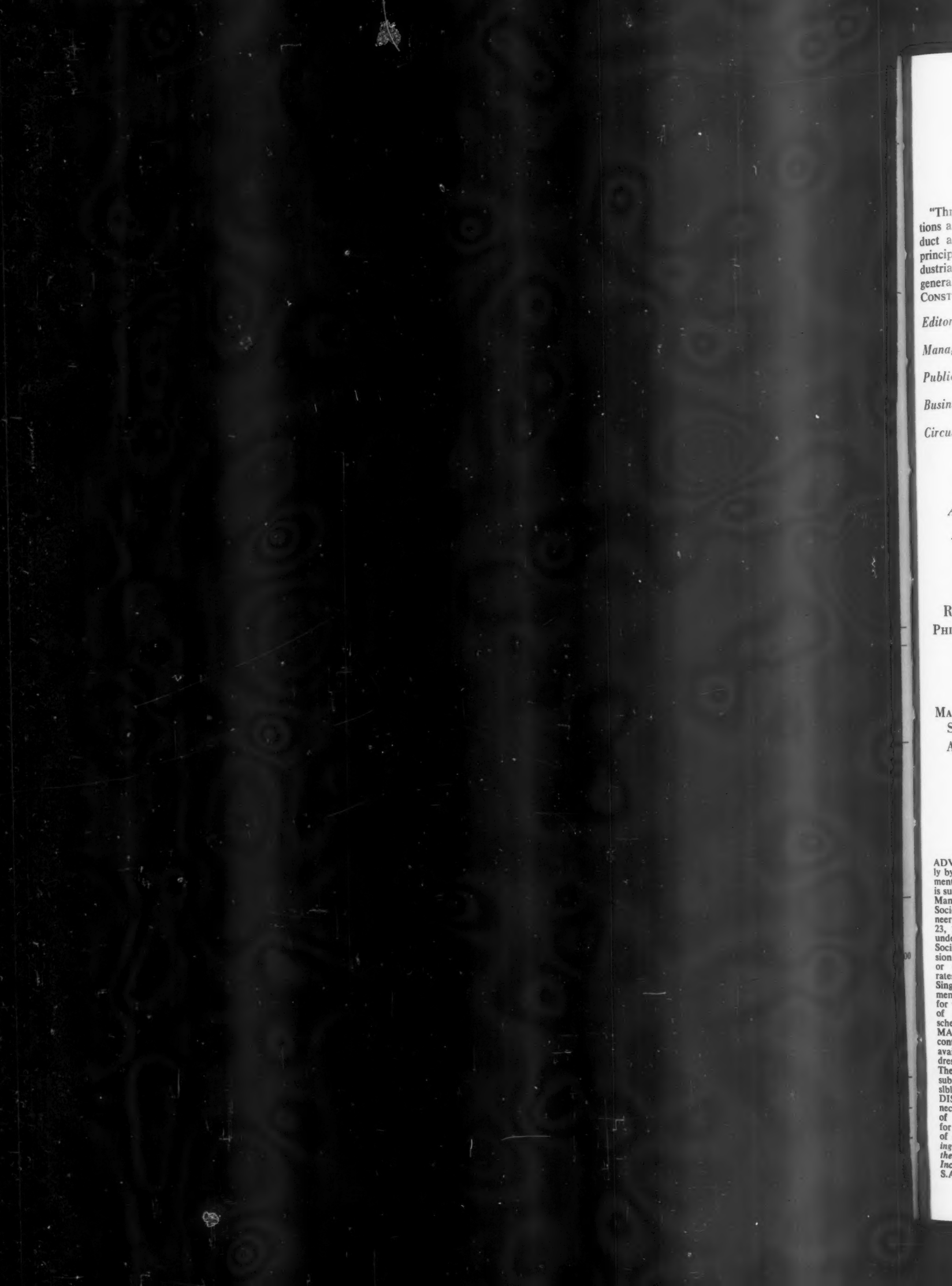

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PL (Production Logic): A

IN TODAY'S CLIMATE of keen competition from both domestic and foreign manufacturers, it is critical that American industry utilize all its available resources to a maximum. Ironically, the most neglected resource on the company team is frequently the group representing the bulk of personnel and equipment investment—the Production Division.

There is an abundance of information that can be gleaned from the production area that vitally affects other corporate divisions in the fields of inventory, packaging, distribution, service parts and traffic. Policy and action affecting these activities all emanate from the group that plans and guides the production function—the Production Control Department.

The combination of logical production oriented thinking and the application of production control theory can establish criteria permitting top corporate management decision in the areas of marketing and finance, in addition to production. These considerations and their application to the solution of problems are of major importance. We will therefore refer to this thought combination as "Production Logic" (PL).

PL, in its full scope, is a philosophy that is readily applicable in the solution of every-day production problems. It is a philosophy advocating that each individual approach a problem with the understanding that he will draw upon all available resources in order to determine the best solution. These resources are represented by the personal capabilities of the individual, available manufacturing data, and mechanical or electronic tools to aid in the processing of this data.

Necessary Data

The Production Control Department is the group capable of providing information that is required for the proper application of PL. The following data must be available in order to formulate production policies, which, when evaluated and combined, will frequently lead to valid PL conclusions:

1) Unit cost for each manufactured and purchased part.

2) Set-up hours and cost for each operation to be performed on an in-plant part.

3) Quantity of both manufactured and purchased parts used yearly.

4) Completely accurate inventory records reflecting the status of raw material, work in process, and finished goods. This is an extremely critical area, and must be continually validated by inventory checks.

5) The department and work center where each oper-

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A New Concept in Complete Management Thinking

By STANLEY MANTELL

ation is performed, and the standard hours per unit required for completion.

6) The cost of carrying inventory for each group of stocked parts. This cost should be represented as a percentage of the inventory value itself. The accounts that carrying charges should be calculated for are: raw material, manufacturing work in process, and finished goods. Facts that must be considered in order to properly evaluate the cost of carrying inventory are: interest on capital invested in inventory, taxes, insurance, obsolescence, and handling and storage.

7) Production forecasts that are critically needed for good planning. Generally, it is more desirable to attempt to have production levels remain constant, and permit the finished goods inventory to vary during seasonal trends; thereby, reducing to a minimum costs incurred in manpower and production rescheduling.

Measuring Effectiveness of Control

The quality of activity of any production control department is in proportion to its ability to operate. To measure the effectiveness of a particular production control organization, the following factors should be considered:

1) Validity of customer delivery promises.

2) Waiting time in a production department resulting from part shortages.

3) The yearly inventory turnover rate of each inventory account. It is obvious that the higher the turnover figure, the more effectively the company is utilizing its capital invested in inventory. A high turnover representing a

Mr. Mantell is production control superintendent at the Hartford, Conn. plant of Royal McBee Corporation

"Although companies may be in business for various reasons, the majority of corporate decisions are invariably based on economic considerations. It is therefore logical to translate a production control problem into dollars, and accordingly base the decision upon the most economical approach"

smaller inventory investment brings to a minimum parts scrapped due to obsolescence. Turnover represents the dollars relieved from each account during the year, divided by the average inventory for that same period. This measurement reflects a relative rather than an absolute condition, and it is possible for the department to determine how effective their operation is compared with any previous period. It also permits production control to establish an optimum turnover figure which should be constantly strived for.

4) Stabilization of the production level and work in-put to manufacturing departments, resulting in a minimum of manpower fluctuations. This will create an optimum situation as far as utilizing direct labor manpower on hand, and minimizing laying off and rehiring costs.

Although companies may be in business for various reasons, the majority of corporate decisions are invariably based upon economic considerations. It is therefore logical to translate a production control problem into dollars, and accordingly base the decision upon the most economic approach. Obviously, there will be instances where consideration must be given to other conditions (i.e.: sales policy, business ethics, advertising benefits, emotional impact upon consumer, etc.) and in these cases PL cannot be the sole factor determining a decision.

One example where PL can effectively be employed in order to more accurately provide a solution for a production problem would be the "Make" versus "Buy" decision. It is accepted practice to compare an estimated in-plant standard cost figure with a purchase price in order to determine if a part should be produced in the plant or by a subcontractor. If the buying of specialized equipment is necessary to manufacture the parts involved, a pay-back period is established within which the cost of this equipment must be replaced by profits resulting from the transfer of such part(s) from a vendor's shop into the main plant. Usually, consideration is not given to the fact that the plant must increase its work-in-process inventory from the time it purchases raw stock until the finished part is completed. This additional investment may increase the cost of producing the part by 15% to 25% of the average investment value, dependent upon the material the part is fabricated from, the manufacturing method, and prevailing economic conditions. When a part is purchased from a vendor, it is received and inspected prior to company acceptance. If this inspection reveals that it does not meet desired quality standards, it is returned to the vendor at no cost. However, when the same part is being produced within the plant, the scrap rework costs will have to be absorbed by the plant itself — subcontractors are no longer involved in this transaction and the company has undertaken the problem that used to lie with their vendors.

Carrying this line of thinking one stage further, we can consider attempting to subcontract all expensive parts involving a long manufacturing cycle. This would result in decreasing the company's investment in inventory to a minimum. Another consideration in evaluating a "Make" versus "Buy" decision should be that the actual part purchase cost rather than the standard purchase cost be compared to the in-plant manufacture cost. If this is not done, it is possible that the favorable variance on a subcontracted part will be merely transferred from the purchasing to the manufacturing department, with no realistic dollar savings on the part of the company. In fact, there will be a dollar loss in this case, because specialized equipment may have to be purchased in order to provide in-plant production.

The examples that follow have been chosen to illustrate typical instances where the application of PL can be employed.

Problem Number 1 — Production

A typical manufacturing concern with individual manufacturing departments fabricating parts for a final assembly line has the usual problem of frequent shortages occurring during the assembly operation. This company has approximately 10,000 different high production parts in process. These parts are all fabricated of steel, and require varied manufacturing operations such as milling, screw machining, blanking, and grinding. Shortages on the assembly line result

in waiting time, which means that there are incentive workers that must be paid while they produce nothing. This condition continues until the integrated assembly lines are again furnished with the needed parts. Other effects of this assembly waiting time are: not meeting production schedules, customer delivery promises becoming invalid, and overtime required in order to make up lost production in both assembly and manufacturing departments. Usually the initial management reaction is to remedy this situation by increasing lot sizes of each manufactured part when the order point is reached. This is the reaction resulting from panic thinking, and causes more frequent occurrences of parts on "critical shortage". Side effects of this policy are to unduly increase inventory investment and correspondingly decrease the turnover of the work in process inventory account.

Solution

In order to rectify the above stated problem the following policies should be instituted by the company's Production Control Department:

(a) Insure that inventory control records are absolutely correct and properly reflect the stock condition of each part. It is impossible to perform accurate planning without having basic records that are correct at all times. One activity required to attain this condition is to constantly inventory parts in all crib areas of the plant, and to use these inventories as audits for checking inventory records.

(b) Decrease order quantity lot sizes of manufactured parts. One of the immediate complaints registered by management in taking this step might be that the cost of setup would be greatly increased for the same amount of production. Surprisingly enough this is not necessarily true. In a poorly controlled inventory situation where rush orders are hurriedly routed through the manufacturing departments in large order quantity basis, each operation to be performed for this order lot is usually broken down and set up more than once. A good check to determine if the complaint of increasing setup cost is valid is to calculate the ratio of dollars spent for direct labor to dollars spent for setup cost by department, both before and after decreasing the order lot size quantities. Frequently, this ratio of costs remains constant. By decreasing the order lot size, the work in process inventory is reduced permitting more flexibility in performing manufacturing operations. The time required to perform each manufacturing operation is shortened and results in each piece of manufacturing equipment producing a larger variety of different parts daily. Therefore, the possibility of a small lot of parts not being completed on one setup during any manufacturing operation is decreased. Also, behind schedule hours for any manufacturing department can be more easily eliminated by running through smaller order quantities, so that each part behind schedule can be completed more quickly.

The smaller the lot size of parts scheduled for production the more the work in process inventory account will tend to decrease. This results from less manufacturing time required to perform each operation; hence the faster these parts will be turned into finished goods inventory from a raw material state. Accordingly, a smaller raw material inventory is required since immediate demands upon this account will lessen as production orders diminish in size.

It should be remembered that when order quantities are decreased, the frequency that production orders are run for any individual part will increase. As this frequency increases, the minimum stock point is approached more often. This necessitates inventory control records being absolutely accurate (for example: if turnover for a particular part is eight times rather than four times per year the minimum stock point is reached twice as often; therefore, the possibility of part stock-out is doubled).

(c) When critical problems for production and assembly have been alleviated, and "ABC" study of all parts produced and purchased should be made. An ABC study is merely a compilation of the extensions of yearly usage multiplied by unit cost for each manufactured and purchased part. These extensions are grouped from the highest to lowest value, with break-off points representing an A, B and C level of inventory. It is probable that after performing this study the company will discover that 10% of the parts used represent 70% of the cost, and conversely a small percentage of the cost is represented by a large majority of the individual part numbers.

The purpose in making this analysis is to provide a stringent method of control for the "A" or expensive parts, while exercising a minimum of control for the "C" type parts.

If corporation capital is limited, management may decide that it is unable to increase its inventory investment. Therefore, "C" parts could not be produced in quantity. If this be the case, consideration should be given to only increasing the order quantity of purchased parts, thereby taking advantage of quantity buying. When increasing an order quantity given to a subcontractor or vendor for a purchased or subcontracted part, company management is not increasing their own inventory investment one iota. Parts are not paid for by the company until they are received, inspected and accepted from the vendor. The only additional financial risk the company is facing is that of obsolescence by extending themselves over a longer period of time than they would have prior to the performing of ABC inventory analysis.

An additional advantage of the ABC plan would be to guide the Project and Methods Engineering Departments as to which small quantity of parts represent the large cost of investment. With this information, they in turn can apply their efforts and research to the solution of problems on the expensive parts, and the company will be able to capitalize on their efforts to a maximum.

As important as having factual inventory records, is being certain that parts purchased from a vendor, as well as parts produced in the plant manufacturing facilities, are of a high quality. If this is not the case, a company must carry a large safety stock in order to prepare for the expectant high reject rate. If rejected parts are a common occurrence the company must make a large investment in a theoretically inactive account. This is one example where good manufacturing techniques and good quality control can help decrease the work in process inventory investment.

(*Continued*)

Problem Number 2 — Financial

Every industrial corporation invests a large proportion of its total assets in inventory. It should be the responsibility of the Finance Division to establish the total dollar limitations for investment in inventory accounts for each manufacturing plant.

The proper control of inventory investment can release additional funds for other uses, such as building expansion, new equipment and machinery, public relations, and advertising.

The cost of providing dollars for inventory investment under ordinary circumstances would not exceed the cost of borrowing this money. However, in certain economic situations, this cost of procuring capital could be equal to the return on investment.

Solution

The Production Control Department can properly determine the effective inventory turnover ratio for each manufacturing division. The evaluation of this optimum turnover would consider customer service, manufacturing efficiencies and forecasted production requirements. The optimum inventory investment can be quickly determined for each account by dividing the yearly individual account build-up based upon forecasts of production, by the calculated inventory account turnover factor. Generally, the smaller the work in process inventory investment, the easier it is to operate a production division. With large unbalanced inventories, losses or reduced control are likely to occur.

After evaluating the desirable inventory investment for each yearly forecast, the corporate level financial division can allocate the necessary funds in order to maintain business operations for the following years. It is frequently a shortcoming of the corporation comptroller's office not to dictate what the desirable inventory investment should be during each fiscal year.

It is critical that accurate forecasts for finished goods requirements are furnished to the production division, not only for the purpose of determining inventory investments, but also to properly evaluate machinery required, direct labor hours needed, optimum shifts to be worked per day, and desirable manpower for producing the forecasted work load.

Problem Number 3 — Marketing

An important problem for a corporate marketing division is to institute a procedure that insures quicker delivery of an adequately protected product to the customer. Combine with this problem the necessity of decreasing the cost of transportation and distribution, while maintaining a minimum inventory of finished goods.

A typical distribution plan in a marketing orientated office machinery company might be to have sales or branch offices in larger cities throughout the country. Each of these individual offices usually maintains a stock of products sufficient to service their area of operation. These sales offices replenish their stock when a minimum point is reached, by receiving new goods directly from the manufacturing plant. Upon receipt of these products, they are unpacked and checked for operational defects. Wrappings and securing tapes are removed in order to prepare the item for delivery to a customer. Although this procedure does permit the customer to receive an operative product, it is an expensive way to conduct a business, as the inventory is high and the service time costly.

Solution

A great deal of inventory investment can be saved by providing direct shipment of the product from the plant to the customer, while still maintaining distribution authority in individual sales offices. This would necessitate having a package that would properly protect the product during shipment, and yet insure that upon receipt the customer could easily remove the item from its packaging container and install it so that it is ready for use. It is essential that the unit be received in the same operative condition as it was when leaving the plant, so that there would be no customer sales servicing labor required in order to check the machine from an operational point of view. Also, it is necessary that there be no adhesive tapes or strings securing moving parts, since this would not favorably impress a customer when receiving the direct shipped item.

Companies are beginning to solve the packaging problem by utilizing some of the many new types of plastic materials, which afford protection and customer appeal that has never been able to be duplicated in the past by standard paperboard type cartons. By applying this type of packaging, and being in a position to ship directly to a customer from the manufacturing plant, not only will the corporation be able to effectively decrease inventory investment, but will also enjoy a savings in customer service cost. Transportation costs will be reduced since there will be no intermediary stop at a sales office prior to a customer receiving a plant produced product, and since the tare weight of the packing will be decreased.

In summary, all products produced by the factory would be immediately stocked in the factory warehouse, with a high production type plastic package employed to protect

the manufactured item. If direct customer shipments involving any distance are to be shipped by air rather than overland, the additional cost of air transportation can be offset by reduced packaging cost plus a reduction in inventory investment. An additional advantage would be quicker delivery to the customer of the machine that he has ordered.

Problem Number 4 — Customer Service

Every company manufacturing a product which is continually changing in design and operation, faces a customer parts service problem. These obsolete parts must be supplied for a certain period after the part is no longer used in the standard unit. This service period of obsolete parts varies from six months to fifty years, dependent upon the individual industry and customer demands. In order to provide this costly service it is necessary for each company to carry a part order inventory (which may cost the company 15% to 25% of the inventory value yearly), clerical and shipping staff, and an investment in obsolete tooling. These costs of operating a parts order department will affect current overhead at all times, and this cost is reflected in the manufacture of the currently produced and marketable items.

It is conceivable that the manufacturing cost at any one time can be reduced by initiating a new company policy in regard to part orders and replacement part demands. The Production Control Department of a company has control of the part order stock and must maintain a necessary minimum inventory of these parts, as well as retain the tooling required to produce more parts, until the total stock requirements for the stipulated replacement program has been fulfilled.

Production Control is responsible for determining the proper quantity of obsolete or replacement parts to produce on each production lot. Although the inventory of finished parts may be kept to a minimum, it is still necessary to retain the obsolete part tooling on which the company continues to pay insurance, taxes, and depreciation costs.

Solution

The Marketing Division is the one area of the corporation that can properly educate the consumer or customer as to how long he should expect the company to provide him with replacement parts for a product that he has purchased. If Marketing can be successful in convincing the consumer or customer that he should expect this service for an absolute minimum of time, not only will the company be able to enjoy a larger sales volume of currently produced products, but such a policy will also permit the manufacturing plants to maintain a smaller amount of years' supply of obsolete parts, and a correspondingly smaller parts order department staff to stock and ship these parts.

All of the above sample problems involve production management activities directly. By utilizing PL, a member of the production team can recognize these problems and others like them, and request that management people and divisions other than his own combine efforts so that an end result will be atained that is monetarily beneficial to the corporation as a whole. ■

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Communications: What Do We Mean?

By **FRANK WILTON**

INDUSTRIAL MANAGEMENT has been concerned with communications since the stone hammer was a tool and the first "leader" put his aside to direct the efforts of others. In modern industry employes depend on instructions, in one form or another, to perform their jobs. We recognize that rumor, gossip, and the grapevine are sources of facts or data, unreliable as they may be. We understand that the grapevine can be made impotent by sincere, timely and factual information.

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So much has been written about employee communications that the main objective of informing people has become clouded. For example, it seems to me to be loose thinking to view communications as a golden path to good industrial relations. There are many reasons why; i.e., often what management must communicate may be neither pleasant nor readily acceptable to employees. Yet, generalizations have been conveyed in thousands of words indicating good industrial relations resulting from communications programs.

This is no laundry list of what to communicate to employees. It is a restatement of some basic principles, i.e., that communications is the act or fact of informing people.

Management must communicate to lead, but informing people is only one ability of the able manager. Briefly, and to illustrate the point, let's select an able leader who is fair, firm and consistent. The employees respect him. He is courteous to employees, and they like him. This leader knows his job responsibilities, is a good organizer and delegator. He keeps his people informed and has an ear for information coming from his people. Would we want this person on the management part of the industrial team? It would seem probable that a good price tag would be offered to purchase the services of this manager's total abilities.

We recognize that the ability to communicate is necessary to industrial management, and that industrial management includes activities identified with productivity, quality, costs, care of plant and equipment, sales, and employe education, training and safety.

What is communications? It is one of several important functions of able management. Basically, communications is "telling 'em what they need to know." It is also listening in order to find out what employees need to know. If this is an accepted principle, then we have restated it. The problem isn't to develop techniques of what to communicate. We can all make a list of what the employees need to know, but the fog can get thick when we consider *how* and *when* to tell them what they need to know.

Let's break it down and take it one piece at a time. One of management's jobs is to communicate. To accomplish the purposes of the business, objectives must be understood and accepted by the employees. We definitely can't get along without them. This makes for a successful business? Certainly not, by itself alone.

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As to the *how,* is there any substitute for face-to-face talking things over? It is one of the best ways of listening to the employees. For example, an employee was heard talking to another employee during a coffee break: "I need facts to get my job done as it should be done. How I get the "dope" is important to me. The grapevine isn't much help — you can't depend on it. My boss knows what I need to know and when I need to know it. He gets the word to me okay, and what's more, I know how I'm doing. He shows he is interested in my work, he listens to me; and you know, I'd bet he would go to bat for me if I got in a jam. This is a good outfit to work for."

Who in industry doesn't recognize the importance of written information? How better can this story be cited than in recalling memo-pads headed "Verbal Orders Don't Go" or "write it and then we will both know"? How to communicate and get through to people involves seeing, hearing, feeling, tasting and smelling, or combinations of these five senses. The memo-pad communications doesn't utilize the employees' sensory organs to the degree possible in face-to-face communications. When it is possible, as it is occasionally in a laboratory, to have a person see, hear, feel, taste and smell something, he'll get the total picture.

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The *when* to communicate involves timing. Again, we can approach this by listening to an employee's answer to the question, "when do you want to be informed?"

"Well, good timing on that is whenever I do a good job. I earn some unfavorable comments, too. I guess it is this way: I want to hear favorable comments right away, and when I have to hear unfavorable things, the quicker the better."

Breaking apart the how and the when of communications underscores the feeling of employees. We think that it is management's job to lead employees to accomplish the objectives of the business. Employees need to understand and accept these objectives. We suggest the need to discriminate as leaders as to what communications can do, can't do or should be expected to do as one activity of management.

Informing people, is not a panacea for management's success as managers. Understanding the needs and feelings of employees is a priceless tool of the able leader. True, a successful business is generally managed by people skillful in communications. This is not the same as saying that skillful communicators make successful managers.

One additional point should perhaps be added: Common sense, not fancy communications programs, should be employed in informing people. And finally, one cannot find out what people need without listening. ■

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Ideological Pitfalls

in Contemporary Management Practices

By ALFRED L. THIMM

IN MY RECENT EXPERIENCE of consulting, reading management journals and attending management and industrial engineering conferences, I have been struck by the existence of two dangerous tendencies in current managerial thought that may greatly harm the future development of our profession. These two tendencies are (a) an excessive administrative preoccupation with the manual worker, above all the production worker, and (b) an almost pathological inclination to blame the unions for any and all difficulties that may face management. As a consequence of these tendencies we find that insufficient attention is devoted to the real problems of contemporary management: 1) the time-lag in top management sophistication and knowledge, and 2) the development of a dynamic theory of organization and decision making.

Management's Preoccupation with the Manual Production Worker

At a time when the number of production workers in our society is relatively decreasing quite rapidly, at a time when, more importantly, direct labor costs are an ever decreasing portion of total costs, while staff, clerical and distribution costs are mushrooming,[1] at such a time motion study, work measurement, incentive payment plans, methods analysis and work sampling (applied predominantly to production line employees, rarely to clerical workers, but never, never to top management) still comprise the chief tools of managerial cost control and work planning. Industrial Engineering may require today mathematically more sophisticated practitioners but the heart of most collegiate industrial engineering programs[2] still consists of the eternal motion and time study and production control courses. These may or may not be topped off with an introductory course in "operations research," which, in most cases, however, has little relevance to the rest of the curriculum. Most of the graduates of such pedestrian programs are only too eager to spend the next ten years of their lives improving plant layouts and time standards without ever challenging the narrow use made of their skills by top management. Even as sophisticated an organization as SAM or AIIE will concern themselves overly with the additional refinements of production and methods techniques as in the case of the recent excellent SAM-ASME management engineering conference. Might not all this effort, skill and intelligence produce considerably greater returns if they were applied to the comparative virgin fields of overall managerial effectiveness, analysis of organizational dynamics and administrative costs?

The roadblock to more efficient operation which top management often creates by its hostility to new and mathematical decision making processes is well illustrated by a case involving the major division of one of our largest manufacturing companies. After a good deal of persuasion it was finally decided that a divisional operations research group under the leadership of a top manufacturing engineer should be formed. After approximately two years of existence the major contribution made by this group of engineers and scientists consisted of a modified Gantt assembly chart which indicated the large number of basic, exchangeable components that comprised the custom made products manufactured by this firm. It is both pertinent and sad to add that this assembly chart constituted a major accomplishment and practically revolutionized the production scheduling of this division which, alas, had been in business for many decades. It is equally pertinent and even sadder to add that no other important success has been achieved by this O.R. group, mainly because they have been unable to sell top management any project of greater sophistication than, say, a revised sampling inspection plan.

There is an even sadder tale of the research and development division of a large airplane motor manufacturing firm. Here a young research engineer became interested in experimental design, and, after reading some of the literature, decided to drop all but sixteen machines from his

[1] "In 1947, salaries (the mode of payment to white collar workers) were one-fourth of the labor costs in manufacturing; by 1957 they had gone up to one-third." Daniel Bell, "The Subversion of Collective Bargaining," *Commentary*, March 1960, p. 190.

[2] There are exceptions, of course. In a small number of better colleges the industrial engineering-industrial administration programs have been sharply revised with the consequence that most of the old line I.E. courses have been "phased out."

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project, but to arrange those in the form of a Latin square. His statistical analysis thereafter indicated that the one factor no one had considered so far — air ducts — was the major trouble maker, and subsequent investigation determined that mice had been nesting in the air ducts! His supervisor, however, immediately returned his report with the comments that mentioning of such items as "Latin" and "Graeco-Latin squares," "interaction estimates," etc., etc., would get them all fired by the *engineers* who managed this research division! A metallurgist who took this writer's graduate engineering statistics course had almost the identical experience when he tried to apply "new-fangled" experimental design techniques over the opposition of his boss, a chemist, in his department at a northern New York plant of one of our oldest corporate giants.

Without doubt, most of your readers can supply many additional case histories even more descriptive of the lack of mathematical sophistication so frequently found among top-management and so frustrating to their hired hands, the engineers and scientists.[3] If our professional journals and conferences spent less time on work measurement and more time on examining the state of mind of top-management, the efficiency of our entire industrial plant would be raised materially. The *Harvard Business Review* and the leading Graduate Schools of Business, through consistent emphasis on human relations, were able to convince management of the virtues of modern personnel policies. A similarly consistent educational effort might either change top-management's attitude toward modern quantitative tools or, even better, change the composition of top management.

Labor Unions, the Scapegoats for Poor Management

One of the functions of labor unions ordinarily not discussed in courses on labor economics and industrial relations, consists of their capacity to protect management's tender ego by carrying on its shoulder all the blame for management's trials and shortcomings.

This self-indulging state of affairs was beautifully illustrated at a recent management conference. A Canadian engineer asked the speaker, a top production executive of one of our largest corporations, why the speaker's particular division had not been able to solve its production scheduling problems while their British competitor had satisfactorily met this problem over five years ago. After a minute of injured silence came the answer. "Our British competitors just don't have the problems we have, they don't have our union problems"! Needless to say, the British company in question not only "has a union" but, moreover, the national president of this particular union happens to be a member of the British Communist Party who has been fighting every sort of technological innovation tooth and nail, while, on the other hand, the American union in question, like most C.I.O. unions, generally has not obstructed technological progress.[4]

Perhaps the real reason for the British company's successful solution of an irksome managerial problem as well as their strong competitive position in this country lays in its strong, technically trained, management that was developed during a decade of struggle with German, Japanese and Italian competition, while the American management thought itself protected by high tariffs and high administered prices.

Similarly the steel industry's complaint that labor is the (sole?) cause of its difficulty to meet the increasingly strong foreign competition is quite unjustified. Drawing upon the *Background Statistics Bearing on the Steel Dispute,* U. S. Dept. of Labor, we see that

1) During the period 1952-1957, the major competitors of the United States steel industry, West Germany, Great Britain, Japan and France, experienced a greater increase in hourly steel wages than the United States.[5]

2) The employment cost per ton of steel of clerical and administrative employees, i.e., non-unionized employees, increased at a much higher rate than the employment cost of hourly (unionized) employees.[6]

Without in any way taking issue with the merits of the steel strike these two sets of data show clearly that labor cannot be blamed for the loss of business to foreign competitors; neither can cost and price increases solely be explained by citing the 150% increase in wage employment costs since 1940. The 350% increase in the cost of *all*

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[3] Poor management has frequently one positive consequence. It greatly helps in providing engineering and science teachers for our colleges, who seem to be increasingly staffed by frustrated refugees from industry.

Thus, for instance, the young engineer who found mice in the air ducts is currently teaching at a good Eastern engineering school and has already produced two excellent books in his field.

[4] Thus the FRB manufacturing index shows a 58% growth for the period 1947 (actually 1947-1949 = 100) to 1959 while the number of hourly-paid production workers remained the same, and the number of clerical employees increased by over 60%. Obviously such a structural change in the work process could not have been accomplished if the bulk of American labor unions in manufacture had been seriously obstructing technological and managerial innovation.

[5] *Background Statistics Bearing on the Steel Dispute,* U. S. Dept. of Labor, Table 16c, p. 36.

other employees must not go by unnoticed, especially because there existed no labor contracts or work rules that prevented management from doing something about *these* increases.

The steel industry data are significant for our purpose because they illustrate dramatically a socio-economic phenomenon that has developed in our society, namely the drastic and rapid increase in the unit cost of clerical and administrative employees accompanied by a monumental managerial indifference to this phenomenon. This entire development becomes even more significant if we realize that the years 1953-1957 and 1959 witnessed the greatest spurt in the introduction of electronic computers and data processing systems into clerical and administrative procedures. Thus the increase in non-production workers and administrative overhead costs took place during a period when "automation" revolutionized clerical work procedures! While automation in the steel mills and the automobile industry removed about 200,000 production workers during the last four years, this same process seems to have increased the number of non-production workers!

It should be emphasized that our increase in the number and cost of salaried employees is by itself not necessarily a sign of poor management. If management, however, fails to recognize the importance of this trend, if management is greatly concerned with a 7% increase in payment to wage employees (total increase in U. S. for 1953-1957 period) while a 37% increase in payments to non-production workers during the same period goes virtually unnoticed, then the ideological preoccupation of management with the worker and his union becomes dangerous. Dangerous both for the survival of our economy and for the development of a truly professional management group.

Contemporary Management and Modern Information and Organization Theory

A greater concern with modern group and organization theory might make top management more aware of the "built-in" causes of inefficiency and poor leadership that find its expression in the above cited incidents. We must realize, of course, that modern organization theory has little to do with "the role of the line and staff, with the functions of the executive, with span of control, and perhaps with a touch of the theory of the firm from classical economics"[7] Modern organization theory is a much more sophisticated, and, I believe, a more useful conceptual development. "Game theory and decision theory, information theory and communication theory, and developments in motivational theory can all be focused on the central topic, (i.e., the organization)."[8] The increasingly mathematical nature of organization theory does not necessarily require an increased knowledge of mathematical techniques among contemporary management, but it does require a different type of thinking and contemplation. The hostility towards mathematics and towards technically trained staff which is widespread among non-technical management must disappear. Quantitative, abstract, analytical thinking requires only intelligence, not mathematical training. *Parkinson's Law,* for instance, though meant as a satire, contains more perceptive analytical insight into the behavior and dynamics of organizations than most older tests on "business organizations."[9] Similarly, it does not require sophisticated mathematical skills to test decision processes against verbal or mathematical models.[10] Thus, for example, the U-2 fiasco could have been avoided if somebody had built a purely verbal model that would have considered in advance decisions to be undertaken if the plane was shot down and (a) the pilot survived, (b) the pilot was killed, (c) the pilot survived and the plane was undamaged, (d) the pilot survived and the plane was destroyed, etc., etc.

"The U-2 fiasco could have been avoided if somebody had built a purely verbal model that would have considered in advance decisions to be undertaken if the plane was shot down and (a) the pilot survived, (b) the pilot was killed, (c) the pilot survived and the plane was undamaged, (d) the pilot survived and the plane was destroyed, etc., etc."

The prompt use and ready acceptance of the modern tools of management will be delayed, however, as long as substantial segments of management neglect the most pressing but rewarding contemporary problems for an undue, excessive attention to the "received management practices." The even more urgent critical self-analysis of current shortcomings in top-management will be infinitely delayed if management continues to blame the labor unions, or any other scapegoat that may be handy, for all and sundry difficulties and failures it experiences. ■

[6] *Ibid.*, table 14b, p. 34. The employment cost of wage employees in 1940 was $17.78 per ton of steel; $46.68 in 1958 and $43.64 in 1959. The cost for "all other employees" was $4.03 per ton of steel in 1940, $18.26 in 1958 and $14.81 in 1959.

[7] Mason Haire, *Modern Organization Theory*, John Wiley & Sons, New York, 1959, p. 1.

[8] *Ibid.*, p. 2.

[9] I was pleased to note that the book review editor of the *Operation Research Journal* recommended Parkinson for the analyst's book-shelf in preference to more traditional fare.

[10] "An analytical model . . . is a set of concepts and hypotheses arranged in a design, or pattern, so as to provide a generalized description of empirical phenomena." Harold and Margaret Sprout, *Ecological and Behavioral Models,* unpublished seminar paper, Northwestern University, June 1958.

By M. J. BALMA, J. C. MALONEY, and C. H. LAWSHE

The Rol t

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EVENTS relatively recent in the history of industrialization have tended to make the foreman a critical and controversial figure in American industry. As American industry expanded and the "chain of command" stretched out, the foreman assumed more and more responsibility for the effectiveness of those who worked under him. Similarly, as industry expanded and greater communication problems arose, the foreman became more important as the representative of the company, of the company's management, and indeed of the entire free enterprise system. This is true to an even greater degree in the larger organizations where the foreman is the only member of management with whom the hourly-paid worker ever come in close daily contact.

Since the passage of the National Labor Relations Act of 1935 and the subsequent development of organized labor on an industrial-union basis, collective bargaining has demanded specialization of function and the attention of higher management in making employee relations decisions. It became costly to make a mistake, and the foreman could no longer be trusted with the authority he once had. With the concurrent trend toward more scientific management, work simplification, and management specialization, the foreman was further relieved of production, engineering, and manufacturing authorities.

In an ever increasing complexity of organizational structure the foreman has become the focal point of responsibility but is often bereft of any real authority.

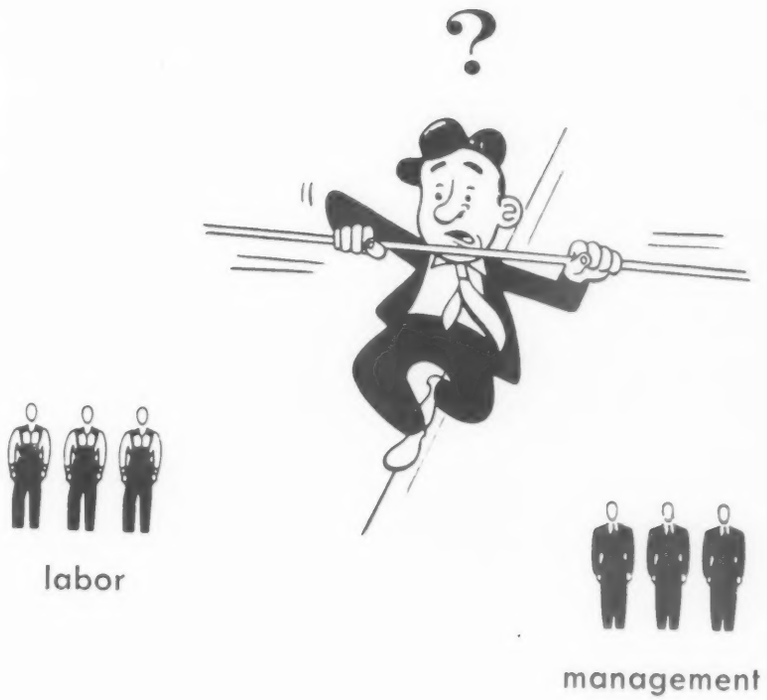
This anomaly is made even more severe by the oftimes divergent goals, methods and basic premises of management and organized labor. The foreman is the "middle man," continuously pressured by both the demands of the union and the direction of management. This has led Roethlisberger to characterize the foreman as both "master and victim of double talk",[1] and has led Wray,[2] among others, to refer to the foreman as a "marginal man." Frequently the foreman has been an hourly worker himself, and he certainly is at the bottom of the management ladder. Even in terms of the law he has alternately been considered an "employee" and part of "management." Such ambiguity, uncertainty, and conflict can only leave the foreman's role unclear, and ill-defined.

A "normal" individual cannot long remain in such an instable, marginal position. He must decide to whom he owes his greatest loyalty, with which group he will identify himself, and what his particular role will be. What sort of adjustment best typifies today's foremen? Has he aligned himself with management, with his employees, or with other foremen? Has he adopted a laissez-faire, I don't care

1. Roethlisberger, F. J. The foreman: master and victim of double talk, in Hoslett, S. D., *Human factors in management*, Park College Press, 1946.

2. Wray, D. E., Marginal men of industry: the foremen. *American Journal of Sociology* January, 1949.

the Foreman in Modern Industry



attitude at work and identified himself primarily with non-work groups such as the church or the bowling league? Or, has he typically been able to achieve the sort of *dual* loyalty suggested by some researchers[3, 4] to be most conducive to effective foremanship?

We do know that during and after the pressure of World War II foremen sought formal organization with other foremen. The ranks of the Foremen's Association of America and the United Foremen and Supervisors swelled to demand collective bargaining rights. The Labor Management Relations Act of 1947 effectively retarded and even killed these groups, and higher management has intensified its efforts toward rehabilitation of its foremen as an integral part of management. They are doing this with various management development programs, conferences, junior executive boards, offices, secretaries, white shirts, and assistant foremen. The most promising of these is the concept of "Foreman-Manager" being developed and implemented now by the General Electric Company. It is a concept of job enlargement, (of job restructure) making the Foreman a true manager by giving him responsibility and authority for a complete, measurable job, e.g., a small, product line with

3. Mann, Floyd C., and Dent, James K. *Appraisals of supervisors and* attitudes of their employees in an electric power company. Ann Arbor: Survey Research Center, 1954.

4. Prucell, Theodore V. *The worker speaks his mind on company and union*. Cambridge: Harvard University Press, 1953.

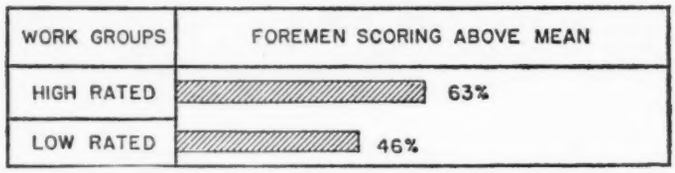


Fig. 1. Percentage of foremen whose work groups were rated as high producers, and percentage of foremen whose work groups were rated as low producers who got above average FIM scores.

responsibility for planning, scheduling, expediting, manufacturing, and inspection.

In a penetrating analysis, Walton[5] has concisely summarized this changing role of the foreman: "Thus the position of the foreman in the industrial scene since 1900 has moved in a circular fashion. The foreman, traditionally the monarch of the shop, was relegated to a position of less and less authority with the advent of scientific management, suffered even more loss of status under the impact of industrial unionism, and therefore turned to organization himself in an effort to secure better terms of employment, has since the war been undergoing rehabilitation of management function and status."

Except for the studies reported by Mann and Dent, very few people have experimentally questioned the efficacy of this process of trying to make the foreman feel that he is a part of management. No one had questioned the effects of a foreman's identification with management on his effectiveness as a supervisor. No one had asked whether high productivity is associated with high management identification, or if unfavorable attitude toward the foreman is necessarily associated with high identification.

An Investigation

The Foremanship Foundation, a non-profit organization, had realized that the status of the foreman was not just an organizational or legal question, but was a psychological problem. In 1953 its Education Committee called upon the Purdue Research Foundation to experimentally investigate the realtionship between foreman identification with management, work-group productivity, and employee attitude toward the foreman.

The technical reader who wishes to examine the specific methodology used in this research will find interesting reading in the series of these technical articles recently published in Personnel Psychology[6, 7, 8]. The non-technical summary to follow, however, may provide some understanding before discussing the results.

Using a new indirect approach to attitude measurement, over a thousand first-line foremen in 28 manufacturing plants throughout the midwest were tested for their degree of management identification. The hourly-rated employees of high and low scoring foremen were asked to participate in a survey of "Attitude Toward Their Foremen"; several members of higher management in each of the plants also appraised the productivity of each of the work groups in the same plant.

For the foremen with high and low management identification, the investigators had measures of work-group productivity and work-group attitude toward the foreman. These were the three basic factors to be interrelated, and the following results were obtained.

Findings

FIM and Work-group Productivity. A significant, positive relationship was found between foreman identification with management (FIM) scores and work-group productivity ratings. With the 1000 cases used high FIM was indeed associated with high productivity work groups. This is illustrated in Figure 1. While this relationship does exist it is not a particularly strong one; that is, some foremen with low FIM scores had high productivity work groups. An insight into this result was obtained from the second major finding.

Relationship Varies Between Plants. The relationship between FIM and productivity varied considerably *between plants.* When findings from one plant at a time are examined it is apparent that within some plants a very low or even no relationship between FIM and productivity exists, as illustrated in Figure 2. This is quite a significant finding; it leads directly to the conclusion that the effect of FIM is not so much dependent upon *individual* (foremen) variables as it is upon *plant* variables. This conclusion, to be discussed more fully later, is supported by the third major finding.

FIM Level Also Varies Between Plants. There was a significant variation in the level of FIM scores between plants; that is, no general level of foreman identification with management was found. As shown in Figure 3, the average FIM score in some plants is very high, in others very low. This suggests the possibility that management identification is a function of management itself, and is, therefore, within its control to change.

Employee Opinion. The degree of a foreman's identification with management bore no relationship whatsoever

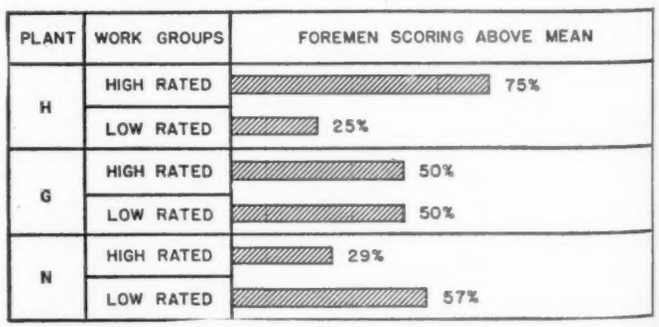


Fig. 2. Example of difference between FIM scores and work group productivity ratings from one plant to another.

5. Walton, Richard E. *An historical analysis—foreman-management relations.* Unpublished Master's thesis, Lafayette, Ind., Purdue Univ., 1954.
6. Balma, M. J., Maloney, J. C., and Lawshe, C. H. The role of the foreman in modern industry: I. The development of a measure of management identification. *Personnel Psychology,* 1958, II, 195-205.
7. Balma, M. J., Maloney, J. C., and Lawshe, C. H. The role of the foreman in modern industry: II. Foreman identification with management, work group productivity, and employee attitude. *Personnel Psychology,* 1958, II, 367-378.
8. Balma, M. J., Maloney, J. C., and Lawshe, C. H. The role of the foreman in modern industry: III. Some correlates of foreman identification with management. *Personnel Psychology,* 1958, II. 535-544.

with how his employees felt about him. Furthermore, employee attitude toward the foreman bore no relationship to work-group productivity, and had no effect on the positive relationship between FIM scores and work-group productivity. However, it must be pointed out that the attitudes expressed in these plants were by and large on the favorable side and that, therefore, there may very well be an employee attitude-productivity relationship when the attitudes are less favorable.

Secondary Findings

A series of secondary studies was also made which may be of further aid in better understanding foreman identification with management.

1) FIM scores were not related to a measure of the extent to which a person's job makes him feel more or less important.

2) FIM scores progressively increased with each organizational level: foremen, general foremen, executives.

3) While the results were not statistically significant, there was a suggestion that second and third shift foremen were more highly identified with management than first shift foremen were.

4) Foremen were more closely identified with management than were foreladies.

5) While there was a consistent trend upward with increasing tenure as a foreman, the FIM score differences were not significant.

6) Foremen of larger work groups had higher FIM scores than foremen of smaller work groups.

7) Although there was a trend toward older foremen having lower FIM score, the differences were not significant.

8) FIM scores progressively increased with increasing education.

Discussion

To the extent that the plants and foremen and employees in this study are typical of others around the country, and there is little reason to think they aren't, the findings of this study provide answers to some of the more basic questions about management identification. However, the subject here is very complex, and this being the first major study of its kind, the results presented also raise many new questions.

There is no question but that foreman identification with management is related to productivity generally in the plants studied here. This isn't a high relationship, and in some plants it was low and even negative. The particular circumstances of the individual plant seem to be the major determinant of both high management identification and a positive FIM-productivity relationship. What are the circumstances that affect these? Perhaps the answer is to be found in the currently popular idea that it is the climate higher management sets, how the foreman is treated and what is expected of him. As has been true with other things such as effectiveness of human relations training, this may well be.

Other, equally plausible explanations may involve such physical circumstances as the foreman's previous job status (e.g., hourly-rated), the nature of the manufacturing process itself (e.g., demanding close foreman-employee contact), the nature of the work (e.g., assembly versus machine shop), size of the plant, attitudes of the union, type and age of the employees themselves (e.g., younger, better educated), or even shop tradition which has been firmly established through the years. Not the least of these possibilities is the structure of the job itself. Most of these factors, however, are under the control of management and under a broader interpretation could be considered to be integral parts of the climate higher management creates, consciously or unconsciously.

1) That higher levels of management identify more with management may be begging the question, but it also may

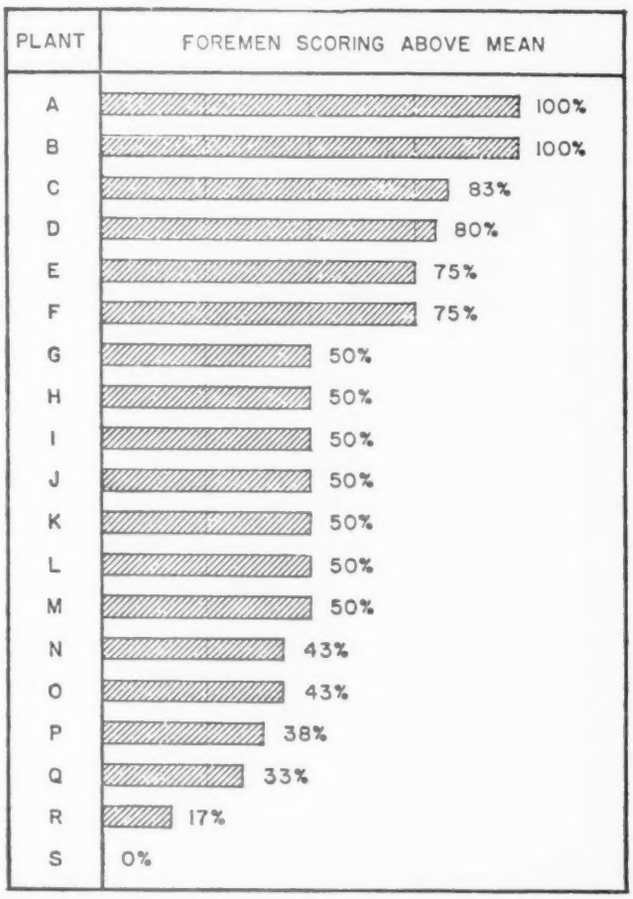


Fig. 3. Percentage of foremen from each plant who scored above the FIM mean score of all of the foremen from the 19 plants.

serve to emphasize that the man-manager relationship can be important in changing attitudes. If a company desires to have its foremen identified more with management, the general foreman, in his day-to-day relationship with the foreman, has the opportunity to set an example, and to coach the foreman.

2) Equally important is the finding that foremen of larger work groups have higher FIM scores. While it is probable that these foremen are the more able foremen, it is also possible that the larger work group helps the foreman to feel more of a manager and somewhat less of a group leader, bringing him closer to the problems of management. It may not be size of group so much as the re-

Current Quotes

"One reason for calling meetings is probably an impulse to assemble anyone who knows anything about the problem; so that people are brought in for their basic information — not necessarily for their abilities to deliberate.

"Very often, their information might be quite as well gathered and summarized by an able reporter, and in this way fewer people would be required to pass upon the problem. That is to say, everyday reporting, in some instances, is a better research tool than holding a meeting." — *Marion Harper Jr., president and chairman of McCann-Erickson Inc., in the 1960 Charles Coolidge Parlin Memorial Lecture.*

"There is still no accurate means of judging managerial performance and potential. It is still not possible, by any test or technique, to select the particular manager who will, now or later, give the best performance on a particular job. The most definite fact that psychological testing seems to have revealed is that managerial success is not determined primarily by aptitudes (e.g., intelligence), or by proficiencies (e.g., technical know-how), but by individual traits (e.g., initiative, dependability, integrity). And the big questions for management remain: how are such traits recognized, and how are they developed?

". . . It seems clear that the road to better understanding of personality traits does not lead to simplification, generalization, and common definitions. On the contrary, the real understanding of such traits inevitably requires the capacity for discriminating among subtle differences and degrees of human behavior. And the judging of such traits in oneself, as well as in others, can become the critical test of individual competence—which is also executive competence."—*Perrin Stryker, in "The Men from the Boys" (Harper & Bros., 1960)*

"If socialism and communism should succeed in these [Western] countries, it will be the socialism of the planning scheme and not the socialism of the nationalization scheme. The latter is a method applicable to predominantly agricultural countries like those of Eastern Europe and Asia. In the industrial countries of the West the planning scheme is more popular because even the most fanatical statolatrists shrink from directly nationalizing the intricate apparatus of modern manufacturing."—*Ludwig Von Mises, in "Christian Economics," vol. 12, no. 15*

sponsibilities included — the structure of the job. As previously mentioned, some companies such as General Electric are taking steps to broaden the foreman's area of responsibility and authority; and it would be interesting to know the concomitant change in FIM.

3) The suggestion that second-and-third shift foremen might be more management identified than main shift foremen may also support this possibility, for the second and third shift foremen do not have many higher management people around to make decisions and handle most of the problems. They are more on their own. By the same token, however, they have less opportunity to be influenced by higher management and may even refer problems to first shift. This may account for some of the inter-plant differences.

4) In the three paragraphs above involvement in the problems of management is really the central theme. In discussing this research, someone remarked: "If you want foremen to feel a part of management, all you have to do is make them a part of management." Managements tell foremen they are a part of management, managements depend on foremen feeling they are part of management, but are they really managers? Are they really involved in the problems (and rewards) of management? The investigators found, for example, that foreladies had significantly lower FIM scores than foremen. This could be the effect of females being less involved than foremen in the problems and rewards of management.

5) One interesting result is that education and, to some extent, youth are associated with FIM. With the job of management becoming more and more complicated and "scientific," and with education so much more common, managements are tending to look for the educated young man as promotable material — the future superintendents and managers. It is possible then that FIM is associated to some degree with a perception of potential for upward mobility. The educational system, too, may teach him to think more like management.

Concluding Statement

In looking back over the problem of the role of the foreman in modern industry, considering foreman identification with management is generally but not universally associated with higher work group productivity, and considering that individual *plant* variables are the determining factor, it is apparent that the burden of responsibility for the problem rests directly with the plant management. Much more needs to be known about the condition of foreman identification with management, but there appears to be two approaches available for the management. The first approach involves piece-meal manipulation of peripheral, external-type variables within the framework of the problem itself — white shirts, offices, shop coats, management development programs, foreman counsels, and even selection standards. The second, and what would appear to be the more fruitful, approach is a direct attack upon the historical causes that created the problem — reversing the trends of specialization and stretching the chain of command. This means a complete restructure of the job. ■

Forming Effective Supervisory Development Programs

By E. C. BENTZEN

Sunderlin Organization
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Few business enterprises operate at anywhere near the level of their potential efficiency. Although there are many reasons, one of the prominent ones is that the supervisors lack competence and drive. As one superintendent put it, "All the knuckleheads are not in the Union." And as they are the spark plugs the productivity of their subordinates, whose performance may spell the difference between success and failure, is not what management would wish it to be.

By supervisors is meant not only those in line positions but also those whose functions are staff in type. For an organization to operate at a high level of efficiency, functions of both kinds must be headed up by able executives whose jobs complement one another.

Indications of incompetence are manifold but these are some of those frequently encountered: The training climate is unfavorable and interest is not sustained. The reasons may be that: there is no physical break between the general work-location and the class room; the desire for improvement is not acute; the course is too general and therefore not applicable to daily problems; the instructor can not establish rapport with the students because he is primarily a teacher and lacks practical experience; frustrations develop when constructive supervisory viewpoints are suppressed and needless barriers to effective operation are not removed. Supervisors do not understand the basic responsibilities of supervision. A foreman shuns his real responsibility and acts as liaison agent instead of the prime mover in getting things done when he doesn't follow through. As an example, a foreman is informed that an order must be shipped by tomorrow evening. He instructs his assistant accordingly and when the order is not shipped and he is asked why, he replies, "I don't know, I told Joe to do it."

Supervisors work so hard that they have little time to manage. They perform functions which should be taken care of by Production Planning. They do paper work which should be done by a clerk. They make investigations which should be made by Industrial Engineering. They are called to the offices of staff personnel to answer questions instead of being visited by these persons.

Supervisors, and executives too, view problems from their own standpoints instead of seeing them in a company-wide perspective. They stress the importance of their own divisions and departments and disregard the effects on the balance of the organization. Sales departments promise quicker than necessary delivery and by so doing extra set ups are required in the factory.

Even superficial consideration of these manifestations of incompetence and poor coordination discloses faults on top management's part as well as deficiencies on the lower eschelons. The remedy, therefore, must be founded on a practicable and tenable philosophy which, by adapting time-tested fundamentals, builds a solid foundation for supporting the superstructure.

Suggested Philosophy

No teacher or counselor can develop another person unless the trainee actively desires improvement. Then, when a receptive attitude has been created the trainee can, and does, develop himself. Without hunger for development and the atmosphere in which it can be satisfied, training is futile. This accounts for the failure of conventional training to hold interest and to show constructive results in everyday practice.

To create enthusiasm for self improvement, a training course must embrace problems currently confronting those being trained and offer specific solutions to those problems. It must, therefore, be tailored to fit the needs of each student. For a fundamental course to be so tailored, it is necessary for the instructor to visit each trainee on the job and learn at first hand exactly what his job situation is and how his understanding of it compares with the facts. This concept demands that the instructor, in addition to being a capable teacher, have practical experience throughout the entire gamut of Management and, preferably, in various types of industries.

It is difficult for a top executive to become intimately familiar with the frustrating conditions under which many supervisors work today because direct communication is blocked by the chain of command and/or information flowing upward to him is sometimes distorted. Company instituted training programs receive poor acceptance, because of this one way flow of information. The supervisors of large companies which have had extensive experience with this kind of training call it "brain washings and propaganda to get out more production."

Information flowing upward is erroneous or incomplete when a conscientious executive withholds unpleasant facts or the existence of problems which he cannot solve although he believes

he can do so. For a training program to bridge this gap, all information emanating from the training group and the reactions of the various trainees should be available to the chief executive. When he can see top management through the eyes of those on the lower levels, he can either take steps to eradicate honest misunderstandings or correct unsound policies and practices.

Executives too often are reluctant to delegate authority commensurate with responsibility. Likewise, too many of their subordinates in important positions are inclined to welcome the absence of authority as it gives them legitimate excuses when they fail to accomplish their missions. The buck is passed to the boss and he soon finds himself carrying the whole load while they assume the role of interested spectators. The ones who should be are not an integral force in the directing effort. For this situation to be corrected instruction must include organizational relationships, administration, proper delegation of responsibility and communications. What to do when the chain of command cannot be followed is of grave importance.

One of the most perplexing problems of supervisors is what to do when they find themselves in the "no man's land" between Management and Labor. They are encouraged to enforce a policy which, when objected to by the Union, is not backed up by the very ones who formulated it.

Management too often fails to initiate training in the belief that all supervisors are well fitted for their jobs, enthusiastic, happy, and loyal to the company. The facts are quite to the contrary — as shown by surveys conducted by qualified experts and experience we have gained by working in over 200 companies. We have not found the average supervisor, before being trained, to be: unusually competent, inherently noble, self sacrificing, and dedicated to the welfare of the enterprise employing him. The majority of them derive little satisfaction from their work and their prime motivation is money to meet their daily expenses and installment payments. They have to work somewhere and only the few best managed companies offer what they subconsciously yearn for. From this it must be concluded that the first requirement is an awareness on the part of top management that improvement is needed and also the decisiveness to initiate a program predicated on the only road to corporate security under our way of life: improve or perish.

If this philosophy is sound, it must be concluded that run of the mill methods of training are in need of revision for managements expectations to be realized.

Essence of a Sound Program

The most successful development programs coming within our purview consist of 3 distinct phases. The first phase lasting 8 weeks, sets the stage for improvement, it screens out those lacking supervisory potential, and it creates economies through operating improvements to pay all training costs for several years.

The second phase, begun 3 months later and also of 8 weeks duration, gives the survivors with promising potential an appreciation of the responsibilities and difficulties on higher management echelons and in all major sections of their company's organization. In this phase the conference leader acts more as moderator and the Vice Presidents play the stellar roles. Again, improvement recommendations are forthcoming and they are often farther reaching and more significant than those emanating from the first phase.

Phases #1 and #2 pave the way for phase #3 which is conducted by a qualified Training Director in the Company's employ and it continues indefinitely.

General Principles

1) Make attendance voluntary and include all supervisors in Production, Sales, Finance, Engineering, and Personnel.

2) Hold 1 class preferably, but not more than 2, per week in the evening, and away from the regular working surroundings.

3) Avoid written examinations and homework.

4) Guarantee non-violation of confidence.

Phase #1 Steps

1) Learn what each supervisor's problems are by visiting them on their jobs. Modify the course so as to concentrate on the areas where help is most needed. "Improve or Perish" is the keynote and text.

2) Explain the proposed subjects to Top Management and obtain approval of views to be inculcated. Also, obtain Management's agreement either to explain the reasons for policies and practices which are sound and correct but misunderstood, or to correct them if they are admittedly faulty or erroneous.

3) Issue invitations to attend the course with a full explanation of its objectives.

4) Conduct the sessions:

   a) Keep attendance record.
   b) Use conference type of meeting with informal atmosphere.
   c) Prohibit admittance of any superior of those attending the classes.
   d) Use stimulating educational aids:
      i. Films — Fair Day's Work for a Fair Day's Pay, for example.
      ii. Tape recorder to allow each supervisor to judge how well he communicates after describing in 1½ minutes any improvement he made in his department during the last 6 months.
      iii. Opaque projector to throw charts and graphs on screen.
      iv. Sheet iron blackboard with magnetized blocks for depicting organization charts, process flow, etc.
      v. Recess for 5 minutes half way through the 2 hour session.
      vi. Lead the discussion to predetermined solutions without disclosing the conclusions; permit the class the joy of discovery. Let the participants talk at least 25% of the time and more, if possible, so long as the discussion is pertinent and constructive.

5) Encourage the class members to find solutions to their individual problems and present them in the form of written recommendations.

6) Use a qualified committee to determine the practicability of the recommendations and to evaluate the benefits. (Some impracticable suggestions lead to feasible courses of action through the committee's thought being directed to newly revealed areas of waste). Acknowledge each recommendation, compute the savings and submit those approved by the committee to Management for executive action.

7) Submit to Management an appraisal of each supervisor's potential

and his fitness for his present position. Include findings and recommendations for further training to overcome specific weaknesses, transfer to a more compatible type of work, promotion, demotion, or termination. One of the end results of this appraisal is a supervisory inventory on which future planning may be based.

8) Hold "graduation" exercises with wives present and award certificates of proficiency.

The principal speaker is a prominent Top Management executive whose theme is accomplishment to date and future goals. The occasion is used to solidify rapport within the management group as a whole.

9) (Optional). Form a Supervisor's Club.

10) (Optional). Award prizes for the most valuable recommendations. In grading value, minimal capital expenditure is considered as well as magnitude of saving.

Phase #2

This is simply a continuation of the principles and steps enumerated above. The differences are that only those selected for further training participate and the emphasis is placed on higher level problems.

Phase #2 may be considered the transition from wholly outside-led training to that which is wholly directed from the inside. The Company's larger objectives and problems are brought out to harmonize the overall team effort.

Phases #1 and #2 lay the groundwork for subsequent conventional training which is entirely independent of consultants and which continue year after year.

Conclusion

In this critical review, we have explained why supervisory development often fails to achieve its purpose. Analysis of the causes of failure led to a workable philosophy and its derived principles. Then, the procedure for implementing the principles was detailed.

It was the writers' intention to come to grips with the problem sufficiently to provide guide posts or markers which must be heeded to insure success. ■

Mid-Career Management Courses . . . Results?

By KENNETH H. ASHWORTH

(Editor's Note: From time to time Advanced Management will publish articles similar to the following, which have a direct or indirect relationship to current or planned S.A.M. activities.)

Today's midcareer executive development and training programs are constantly being evaluated for various reasons. Evaluations are made by some to improve the courses, by others to find grounds for criticizing them as being worthless, and by still others to determine what good the courses are doing.

Many justifications have been made of these programs, but few program salesmen or brochures have been audicious enough to claim that results can be recognized immediately in most executives completing these management courses. If immediate improvements are claimed, the proponents of the programs have usually been cautious not to mention specifically *what* improvements.

This article justifies midcareer management training courses on both of these grounds. It identifies two immediate and specific improvements usually found in executives who complete these courses.

Applying the Course Work

To examine these two improvements in the administrative behaviour of managers, let us look briefly at the executive who returns from an academic program directed at making him a better administrator. Nearly every executive who has completed a midcareer course in management probably asks himself the same question. That first Monday morning as he sits back at his desk facing an overflowing in-box, he reflects for a moment and asks: How will the studies I have just completed help me in my administrative work?

First he will recall the generalizations made by the academicians where he studied. They were interested in developing for him a larger frame of reference for his decision-making and providing him with a better understanding of the interrelations of the many segments of our complex and interwoven world society. Administrative theorists laid before him the whole array of management tools at his disposal for getting the job done. Management therapists gave him instructions on decision-making, effecting change in and through other people, setting objectives, communicating, planning, etc. And, of course, the executive probably remembers with pleasure the professor on loan from the humanities school who was dedicated to broadening the personalities and interests of all participants in the course.

But to the impatient executive who likes to put his finger on the heart of the matter, these generalizations are so broad as to be nebulous answers to his question of how his recent academic training will help him to do his job. He does, of course, realize that these broad and general objectives of the management courses will pay rich dividends in tangible results and better management practices over a period of time. However, the executive or his boss or his instructors might like to point to at least a couple of immediate results of his training program.

Almost any thoughtful executive after a management course will recognize the two improvements in his administrative behavior pointed out below. Now let us look briefly at these two benefits of midcareer executive development and training programs.

The Typical Midcareer Executive

Most executives in or past midcareer today are self-developed, "self-made" administrators. That is, they have had very little or no formal training or education in how to manage. They have learned on their own, mostly from personal experience and trial and error. Also they have learned from observing other experienced administrators operate within the framework of an organization. They have received guidance in management practices from listening, reading, and studying. And they have reached conclusions of their own on how to manage.

Based on personal experience and the other learning devices mentioned above, the manager during his career develops patterns of administrative behavior for getting his job done. He relies heavily on these personally tested and proven patterns and methods of administrative action.

Two very important faults often appear in administrators who have learned to manage in this way by "playing it by ear" until certain patterns were recognized as being reliable and effective ways of getting administrative results. First, these executives often worry about whether they are using the best administrative techniques and procedures available to them in order to get a particular job done.

The second fault, worse than the one just mentioned, is the fear of experimentation. Although the executive may not have complete confidence in the techniques he uses, he often feels hesitant to try any variation of his approach or an entirely different approach to solve problems. These two faults together manifest themselves in such administrative shortcomings as the following:

- Has no time for planning.
- Keeps too tight a grip on the wheel of control.
- Requires too many reports.
- Stays in his own area too much.
- Fails to delegate
- Is too cautious and protective.
- Is too slow in his decisions and is hesitant to act.
- Has overorganized and structured his staff.

The Effect of Management Courses

It is precisely the doubt or lack of confidence in his management techniques and the fear of experimentation that the educational experience can overcome. The administrator in the midst of his career, when thrown into a group of his peers during a study program on administration, finds grounds for developing his confidence and dispelling the incipient doubts of his administrative capabilities and procedures. More than anything else, he

(Continued on page 29)

When we become managers, we no longer have time to remain specialists in our former specialties. We now must become specialists in management. This means that if the manager is to succeed, he must delegate specific responsibility, together with the authority necessary to accomplish that responsibility, to those that he has put in charge of these more specialized functions. In short, he must . . .

Accent th

EVERY company, every organization, is a combination of people. We as managers get very little accomplished merely through our own efforts. It is the combined efforts of all the people of our organizations that make them successful.

You hear it commonly said that the three commodities with which managers work — the so-called three M's — are Men, Money and Materials. What needs emphasis is the fact that it is *men* which are all important; that the manager spends the vast majority of his time working with men. Only through man does he work with money and materials.

The manager's job is not a combination of several major functions, one of which is the responsibility for human relations. The manager's job *is* human relations, and through human relations, he accomplishes his responsibility for the several major functions.

We are always hearing references to *the* company. *The* company is not factories and offices. It is not buildings and machinery, products and services. *The* company is a group of people that establish objectives and policies, and make decisions so that the objectives are accomplished in line with the policies.

It is people who through research and development invent new products. It is people who design these products so that they can be made and sold at a competitive price. It is people who manufacture them at as high a quality and as low a cost as possible. It is people who sell these products to bring in the revenue and it is people who account for the monies received or disbursed in connection with all these activities.

Actually, we do not compete with the products and services of other companies. We compete with people, the managers of other companies. The competition is to see whether we can utilize and motivate the people of our organization more effectively than can the managers of

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th IAN in MANagement

By BRUCE G. McCAULEY

competitive companies utilize and motivate the human resources at their command.

The following quotation bears directly on this subject: "Take two managers and give to each the same number of labourers, and let these labourers be equal in all respects. Let both managers rise equally early, go equally late to rest, be equally active, sober and industrious, and yet, in the course of the year, one of them, without pushing the hands that are under him more than the other, shall have performed infinitely more work."

This thought-provoking statement, made by George Washington back in 1789, clearly indicates that working with people is a manager's major responsibility.

As a man leaves the ranks of a specialist and is given more and more responsibility for the leadership of others, he must be ever alert to counteract the tendency to do the familiar specialist tasks himself, instead of allowing them to be done by others. Upon the assumption of this leadership responsibility, the supervisor undergoes a fundamental change in the nature of his work, in his attitude towards his work and in his concept of the organization in which he works.

We are all familiar with the manager of an accounting department who remains a specialist imbedded in the details of his ledgers; or the sales executive who is still merely a salesman; or the industrial relations manager who rose from the ranks of wage and salary administration, is unsuccessful in becoming a generalist, and in effect remains a wage and salary specialist; or the engineering executive who is inadequate in his administrative and leadership responsibilities, because he cannot shake himself free from the habit of becoming involved in the routine and details of specific engineering projects.

When we become managers, we no longer have time to remain specialists in our former specialties. We now must become a specialist in management. We must realize that

"Although the manager in some instances communicates with groups of people, in relation to his immediate subordinates he must think in terms of communicating with individuals. These individuals have specific work assignments, relationships with others, objectives which must be attained, and criteria for measuring the effectiveness of their performance"

performance of subordinate specialties must be performed by subordinate specialists.

This means that if the manager is to succeed, he must delegate specific responsibility, together with the authority necessary to accomplish that responsibility, to those that he has put in charge of these more specialized functions. When a manager assigns such responsibility, he should provide all the assistance possible to assure that the subordinate is familiar with the past experience and background associated with that assignment. Although the manager can guide and assist in this manner, he must let go and allow the subordinate to handle the function on his own. This does not imply tossing the subordinate into deep water on a sink-or-swim basis. It recognizes that it is the manager's responsibility to direct and guide, while not overbearing the actions and decisions of subordinates.

Accepting New Procedures

It is possible for an individual to learn how to drive an automobile without any instruction and guidance whatsoever. However, the more efficient and by far the safer method is to have a more experienced driver at the student's side who can guide and counsel while the learner takes over the controls and begins to make his own decisions.

Managers will be wise in this regard if they will take the necessary time to acquaint those that work for them with the procedures which have evolved from past experience. Some people think of procedures as regimentation which stifles initiative and the development of individuals. On the contrary, a procedure is the evolution of the best experience that has occurred to date, and, therefore, is an excellent starting point for the subordinate to begin with and improve upon, if appropriate.

This does not limit or hamper the subordinate's responsibility and growth. It provides a foundation from which he can grow, to the end that overall operations may be further improved.

As is common in the opposition to all new ideas, people first vigorously oppose and buck new procedures; then they gradually begin to abide by the letter, although certainly not the spirit; later the acceptance of the procedure by a few key individuals becomes apparent; and, finally, everyone has adopted it and eventually will insist upon its use.

In working with people to determine those responsibilities which can be delegated, the manager must be continuously alert in scrutinizing the characteristics of his assistants. Gradually, he will determine those on whom he can always rely. They will do their assigned work to their fullest ability and will not hesitate to ask for assistance and guidance if their capacity or authority has been exceeded. As long as they understand the rules that the manager has established, such subordinates are loyal and cannot be capriciously influenced by others.

When the manager recognizes such reliable persons he can begin to delegate more and more responsibility to them with confidence that if they get in over their heads, they will not try to cover up, but will bring the matter immediately to his attention. More often than not, this delegation of greater responsibility rapidly develops the leadership qualities of the subordinate to the extent that he is entirely capable of managing people and making decisions all on his own. In fact, it is not uncommon for such a capable individual to learn to manage his functions better than his boss formerly did himself.

Most of us have heard the moans and groans of a football coach whose star quarterback has graduated and who has to rely on last year's substitute for this year's first team. Many times a coach is pleasantly surprised to find that when the younger quarterback assumes full responsibility for the position, he blossoms out to become a better All-American than the player he followed.

Responsibilities should be delegated and decisions should be made at the supervisory level as close as possible to where they are put into effect. Of course, this does not relieve the higher manager of the responsibility for the correctness of the decisions before they are put into effect.

To be slightly facetious for a moment, we are all familiar with the manager who, in effect, only delegates the authority to make *correct* decisions. He makes no allowance for the fact that if subordinates make enough decisions some of them will be incorrect. Such an executive will soon find that his assistants "pass the buck" back to him and that he is compelled to make all decisions.

Some time ago, one of the well known magazines had a cartoon which showed a man standing in front of his boss' desk and the boss saying, "Don't bring me your

problems; bring me your solutions." If you really stop to analyze it, that cartoon was not as funny as it was intended. A manager must rely on the people that work for him and demand that they come forth with recommended solutions. He must train his subordinates to think for themselves and find solutions to their own problems. It is in such an atmosphere that future executives are developed.

Because a manager's job essentially is dealing with people, it is necessary that he develop excellent communication with his people. Much attention has been given to this problem of improving communication up and down the line within an organization. The communication between the manager and those he supervises must be in both directions and clearly understood. Communication is the avenue through which management reaches its objectives.

Although the manager in some instances communicates with groups of people, in relation to his immediate subordinates he must think in terms of communicating with individuals. These individuals have specific work assignments, relationships with others, objectives which must be attained, and criteria for measuring the effectiveness of their performance. As is true of all people, these individuals are subject to specific psychological motivations, fears and desires. They need to know what is expected of them, how well they are doing it, and what else they might do in order to perform their work better. The manager must be frank and sincere in discussing the relationships and performances of those under his supervision with them and in motivating them to greater productivity and higher morale.

People want to know in simple terms how well their company is doing, how their particular department is doing and, finally, how they themselves are doing. Ignorance is a dangerous condition and breeds fear. Most people would rather know that things are not going well and exactly what is wrong, rather than know nothing at all. It follows that the manager who is alert to this human need will spend much of his time with his people.

Clear Communication

The executive's job is to outline the objectives to be accomplished, to forecast conditions which may influence such accomplishment, to plan the steps required to reach objectives, and to guide and direct his people in such a manner that the objectives are accomplished as efficiently and economically as possible. The executive's function is to cause objectives to be realized which would not have been accomplished except for his leadership.

There have been cases where the top management has spent months or even years clarifying its objectives. Then, through a series of elaborate meetings, the next level of management is informed and educated as to these objectives. But finally, all that the first-line supervisor learns concerning these objectives may come from a brief explanation from his superior or a written memorandum, or possibly nothing at all. Thus, the image of what top management set out to accomplish is muddled and confused at the very level of management which has the greatest capacity for its accomplishment.

It is, therefore, imperative that the goals which the manager desires to attain be clearly communicated to the people who have the capacity for attaining them. He cannot possibly attain them all by himself. It is the people that he leads who will accomplish the mission.

By way of summary, the following points are itemized which, if adopted, will enable the manager to do a better job:

1) A manager must spend most of his time working with people. His major responsibility is to influence and motivate others to cooperate toward the accomplishment of specified objectives.

2) A manager should listen receptively to the ideas of his subordinates. They are closer to many of the company's problems than he is.

3) A manager must transmit throughout the organization the objectives, policies and decisions of top management; get them understood and accepted; and motivate all members of the team to work effectively toward attaining these objectives.

4) A manager should avoid making crisis decisions unless it is absolutely necessary. If a subordinate comes forward with an unsatisfactory solution, the manager should not solve the problem for him, but he should point out the solution's short-comings and ask him to come back with a better plan.

5) A manager must not try to know everything about everything. He should manage by the exception principle; that is, only the exceptional situations should come up the line for his decisions.

6) A manager should work on the important, tough problems and delegate the simpler, routine ones to subordinates who are closer to the level at which they should be solved. The manager should refuse to make routine decisions for a subordinate, but always be available to talk problems over with him.

7) A manager must make sure his people know what is expected of them and how well they are accomplishing their responsibilities.

8) A manager should develop the ability to communicate closely with those with whom he works, including the ability to talk their language. He should continually look at the situation as though he were in the other person's shoes.

9) A manager must remember that, although he may delegate responsibility to those he supervises, this does not relieve him of the overall responsibility for the successful accomplishment of his assigned functions. Therefore, the higher one rises in management levels, the more the total responsibility which necessarily falls on his shoulders.

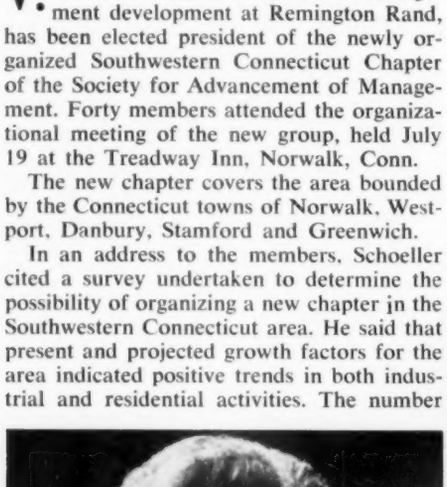
Top management positions are, therefore, high-pressured and lonely jobs. However, for those who have the courage to tackle them, the stamina to live with them, and the capacity to succeed in them, there awaits the rich reward of a feeling of attainment, the respect and appreciation of others, and the personal satisfaction of a job well done. ■

New Chapter Is Begun in Southeastern Connecticut

V. DONALD SCHOELLER, director of management development at Remington Rand, has been elected president of the newly organized Southwestern Connecticut Chapter of the Society for Advancement of Management. Forty members attended the organizational meeting of the new group, held July 19 at the Treadway Inn, Norwalk, Conn.

The new chapter covers the area bounded by the Connecticut towns of Norwalk, Westport, Danbury, Stamford and Greenwich.

In an address to the members, Schoeller cited a survey undertaken to determine the possibility of organizing a new chapter in the Southwestern Connecticut area. He said that present and projected growth factors for the area indicated positive trends in both industrial and residential activities. The number



V. Donald Schoeller

of business executives working and living in the area has more than doubled in the past 10 years, he stated.

Other Officers Named

S. J. Sindeband, president of Teleregister Corp., was named chairman of the board; and Dean Brossman, executive vice president of the Stamford-Greenwich Management Council, was named executive vice president of the chapter.

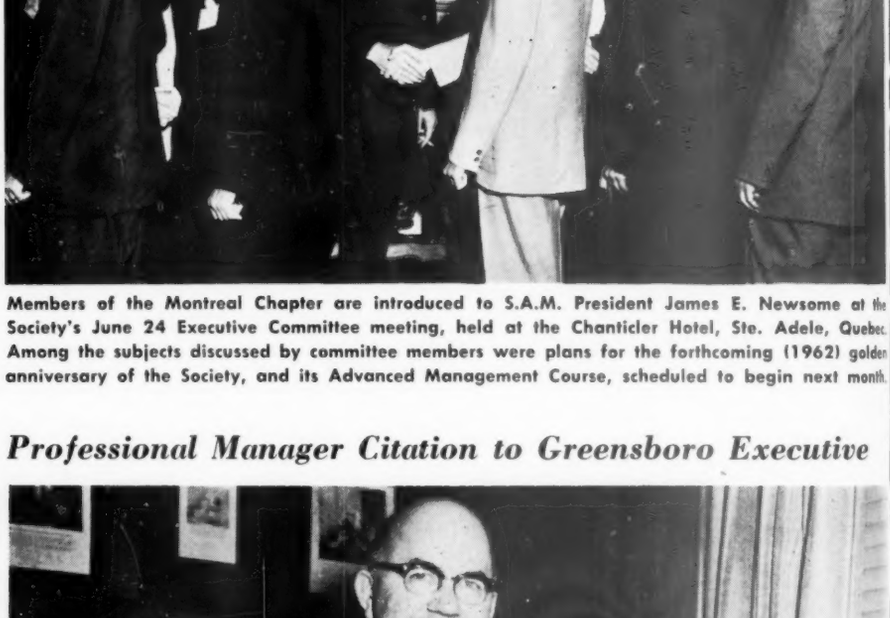
Members of the chapter's board of directors include Harold Engstrom, director of operations research for Norma-Hoffman Bearings Co.; Benjamin Blackford, president of the Stamford National Bank & Trust Co.; Fred Rudge, president of Fred Rudge & Associates; William C. Straub, president of Electric Specialty Co.; L. Reed Clark, president of Clark, Channell, Inc.; and Don H. Scott, president of Don Scott Associates.

Others named to executive posts were John F. Blazier, vice president in charge of public relations; Louis C. Wholberg, vice president in charge of universities and schools; C. Richard Gunzer, vice president—finance; Alexander Greenfield, vice president—membership; and Henry Singer, vice president—management education.

Montreal Chapter Host to Executive Committee Meeting

Members of the Montreal Chapter are introduced to S.A.M. President James E. Newsome at the Society's June 24 Executive Committee meeting, held at the Chanticler Hotel, Ste. Adele, Quebec. Among the subjects discussed by committee members were plans for the forthcoming (1962) golden anniversary of the Society, and its Advanced Management Course, scheduled to begin next month.

Professional Manager Citation to Greensboro Executive



Rhett Ball

RHETT BALL, national director, of the Greensboro, N. C. Chapter of S.A.M., was a recent recipient of the Society's Professional Manager Citation. The citation is awarded to major executives of companies in recognition of their application of the principles of scientific management, as well as their contributions to civic affairs and the advancement of management in general.

The award was approved by the National Executive Committee of S.A.M., on the recommendation of the Greensboro Chapter.

Ball is vice president and director of manufacturing at Heritage Furniture, Inc., High Point, N. C. A former southeastern regional vice president of the Society, he is a frequent lecturer on management and engineering subjects before various groups.

The award was presented at a recent dinner meeting of the Greensboro Chapter, by chapter president John W. McGehee. Featured speaker at the meeting was Dr. Thomas H. Carroll, vice president of the Ford Foundation.

Mgmt. Courses *Continued from page 23*

cannot help but recognize the need for experimentation in his administrative behavior and procedures.

Very quickly the executive learns that all administrators are men very much like himself. They are able but they all have faults; no one is perfect and no one has the answer to what is *the best* way to resolve a problem.

When attacked in a seminar for his presentation of a point, any administrator will bleed. Everyone is vulnerable and the more tenable and cocksure a person is, the more he becomes the target of attack. Perhaps the blood-letting is one of the best devices used by the management courses. It is the equalizer of administrators in a competitive situation and at the same time brings to light the multifarious approaches that can be made to a problem.

Doubt and diffidence based on a fear of not using *the best* administrative technique available in a particular situation are soon replaced by a sophisticated understanding. Everyone comes to realize that there is no *best* way, but there are many *good* ways to handle any administrative situation. If it seems that fools rush in, it is because there are no angels. If a rough situation is resolved in what appears to be a stumbling and uncertain sort of way, it is because there is no perfect way to do it.

Confidence and self-assurance develop in the individual when he finds that what he has learned through experience, trial and error, observation, and self-development is shared by nearly all other administrators and that many variations of administrative procedure exist. The individual finds that he has been operating right on the beam with other administrators and that the administrative road to accomplished task is a many-laned highway.

The fancy names and abstruse terms he has heard in professional circles and read in journals turn out to be labels for some of the every-day administrative techniques that he has been using for years to get his work done. He finds that he is a fully-qualified member of that esoteric group of professional administrators he has heard so much about.

And of course as soon as the executive realizes that there is no one *best* way to handle a difficult situation, he will recognize that latitude exists for innovation and experimentation. He will tend to be more receptive to the approaches to problems given by other members of his organization. He will recognize their techniques as possible ways of getting things done and will encourage more suggestions on approaches. And, furthermore, he will tend to use approaches himself that vary from the established patterns he has developed during his career.

Course planners are recognizing the need for putting across the idea of administrative experimentation as basic to good management. Walter Mitchell, Jr. writing on the S.A.M. Advanced Management Course (*Advanced Management*, June 1960), said:

"Possibly the most basic assumption of this course, and its most fundamental substructure, is the assumption that tomorrow's top manager must be almost instinctively keyed to innovation. More specifically, he must appreciate the need of innovation, its proper timing and its multiplier effect, and be able to manage innovation, encourage it, inspire it and, where possible, author it."

The change and innovation Mr. Mitchell refers to here are not just technological and social but also administrative. Executives stuck in the same old conservative rut of administrative thought and procedure will soon be passed by men willing and able to try new techniques and approaches for getting things done. Today's management courses are preparing administrators for experimentation, change, and innovation. Managers learn not only to be experimental themselves and receptive to other executives' experimentation, but also to stimulate it in others.

Results are Improved Executive Performance

Confident action by the administrator comes from knowing that the techniques he uses are shared by other men on his level throughout industry and government. He loosens his brakes and feels more certain of the methods of attack he applies to a situation. He worries less about his approach, for he knows he is using *a good* administrative technique and there is no "the best way" to handle complex administrative situations. He tends to do more free wheeling and gladly gets into areas in which he was timorous before. He becomes more experimental and some of the criticism leveled at him may disappear as he delegates more, improves controlling and reporting, acts with more energy and decisiveness, changes and simplifies staff relations, and sallies into areas once beyond his realm of concern.

To sum it up, in addition to the general educational benefits coming from a management course for administrators in midcareer, the executive learns that he is not a strange fish swimming alone. He belongs to a school of others very much like himself and the knowledge of company in his administrative dilemmas helps to give him courage to act as he deems best without hesitancy.

These are specific improvements in the administrator after a midcareer educational experience: Number one, the administrator is more self-confident, for when he is faced with a problem for his decision, he knows that his solution, if not the best, is good enough. For since the problem is *his* to resolve, it is "purely academic" as to whether anyone else would have a better solution. Number two, with this insight into the administrative facts of life, he is more experimental and flexible in the approaches he makes to management problems.

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Participants in the Duquesne Chapter's Awards Banquet: (l-r) Prof. Frank P. Numer, faculty advisor; Prof. Harold Fischer; Dr. James L. Hayes, Dean of the School of Business; Frank R. Armour, Jr., president, H. J. Heinz Co.; and Dr. John A. Bekker, faculty advisor. At right, Mr. Armour receives the chapter's "Award of the Year" from Duquesne University's president, Very Rev. H. J. McAnulty.

University Division News: Typical Activities

By HAROLD FISCHER, President

THE UNIVERSITY CHAPTERS of the Society engaged in a variety of activities during the year. These were of real value to education, business and the community.

Typical of the many business men-student dinners that were held during the year by a number of the University Chapters was the "Award of the Year" banquet of the Duquesne University Chapter of S.A.M. This has been an annual event and the highlight of the chapter's program for the past eleven years. This year's award was presented to Frank R. Armour, Jr., President of the H. J. Heinz Company, in recognition of his leadership in the field of management.

Many of our chapters were cognizant of their responsibilities and the opportunities for community service. The *University of Maryland Chapter* was requested by the Secretary of the Election Board to devise a more efficient method for the tabulation of ballots cast in the District of Columbia primary. Professor Wilmer Watrous, faculty advisor of the chapter, and the members responded with a more accurate system for validating and tabulating the 60,000 ballots involved in a period of ten hours. The chapter certainly did an excellent job and the community benefitted as a result of their outstanding work in this project.

The University of Mississippi Chapter, of which Dr. William E. Green is the faculty advisor, arranged an interesting, unique and educational program during the year. Thirty merit scholarship finalists of the State of Mississippi participated in the Annual Management Decision-Making Game which was sponsored by the University of Mississippi Chapter of S.A.M. and by five Mississippi business corporations. This Student Executive Seminar gave the participants an insight into the practice of business management and attracted state-wide attention—much knowledge was gained.

More interesting programs and activities of our University Chapters, such as those above, will be brought to the attention of our readers from time to time in the future for they deserve our heartiest commendation.

The Performance Awards Plan of the University Division stresses: "A live, dynamic chapter will be creative in its thinking and in its programming, continually seeking new areas to penetrate; new activities and projects to develop; and new services to render to its members, the institution, industry and the community."

The horizons are unlimited.

Future Executives at Work: Charles Debter (second from left), student president of the University of Mississippi Chapter, explains some of the techniques of management decision-making to students participating in the chapter's Student-Executive Seminar. Three visitors are Guthrie Abbott (l), Joe Crouch (rear), and Bill Pyle (r).

Officers of the Duquesne University Chapter who helped to plan the "Award of the Year" Banquet are (l-r): JoAnn C. McKnight, treasurer; Russell Catanese, president; Joanne Dressler, recording secretary; Josephine S. Socha, corresponding secretary; and Raymond K. Aiken, vice president.

Members of the University of Maryland Chapter are shown practicing improved methods of vote-counting which they devised for the District of Columbia's first primary election. Supervising the students is Daniel Noll, Election Board secretary.